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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/941,598      | 08/30/2001  | Yair Maryanka        | 553/8               | 6428             |

7590 06/01/2005

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EXAMINER

HA, DAC V

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2634

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/941,598 | <b>Applicant(s)</b><br>MARYANKA, YAIR |  |
|                              | <b>Examiner</b><br>Dac V. Ha         | <b>Art Unit</b><br>2634               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-19, 21-29, 32, 35, 36 and 38 is/are rejected.
- 7) ☒ Claim(s) 12, 20, 30, 31, 33, 34 and 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/03/01</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-2, 8-9, 18, 25** are rejected under 35 U.S.C. 102(e) as being anticipated by Nagai et al. (US 6,393,064) (hereafter Nagai).

**Regarding claim 1**, Nagai discloses the claimed subject matter “(a) modulating a carrier of the channel transmitting the arbitrary datum; and by a modulation scheme for (b) modulating said carrier by a modification scheme for sending the signal” in Abstract; col. 3, lines 40-56; col. 13, line 48 to col. 14, line 20. Particularly, Nagai discloses communicating “a signal” using a first modulation method and communicating data using a second modulation method. By changing the modulation method, inherently the “carrier” is “modified”.

**Regarding claim 2**, Nagai further discloses the claimed subject matter “wherein said modulation scheme includes transmitting a plurality of consecutive symbols at a symbol rate and said modification scheme includes modifying said carrier at a modification rate, said modification rate being higher than said symbol rate” in col. 14, lines 30-34.

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**Regarding claim 8**, Nagai discloses the claimed subject matter “wherein said modulating and said modifying are effected substantially simultaneously” in that Nagai does not teach otherwise.

**Regarding claim 9**, the claimed subject matter “altering said modification scheme to adjust the probability of signaling errors” is inherent from Nagai since different modulation methods have different error probability.

**Regarding claim 18**, see claim 1 above.

**Regarding claim 25**, see claim 1 above and the claimed subject matter “listening by a second device for said signal over a subset of the plurality of channels, said subset containing said first channel and at least one other channel” is inherent from Nagai.

Regarding claim 32, see claim 25 above.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 3-7, 10, 11, 13-17, 19, 21-24, 26-29, 32, 35, 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagai.

**Regarding claim 3**, the claimed subject matter “wherein said modulation scheme includes transmitting a plurality of consecutive symbols at a symbol rate and

said modification scheme includes modifying said carrier at a modification rate, said modification rate being lower than said symbol rate” would have been understood by one skilled in the art since different modulation methods are capable of providing different symbol rate.

**Regarding claim 4**, the claimed subject matter “wherein said step of modulating is effected according to a modulation scheme selected from the group consisting of BPSK, QPSK, AM, FM, CDMA” would have been design specific to one skilled in the art in view of Nagai above since Nagai does not have any constrain on the type of modulation method that could be used.

**Regarding claim 5**, similar analogy of that of claim 4 is applied.

**Regarding claim 6**, the claimed subject matter “wherein the signal is used to communicate at least one message selected from the group consisting of an intention to transmit, an end of transmission, a congestion condition, an instruction to turn on a device, and instruction to turn off a device a request to retransmit and dominant and recessive statuses” would have been understood by one skilled in the art since “the signal” be referred to in Nagai can be any communication parameter used for establishing communication between the devices.

**Regarding claim 7**, the claimed subject matter “wherein said carrier is conveyed by at least one medium selected from group consisting of a utility power line, a DC power line, a dedicated communication wire, a fiber optic cable, a radio wave, an ultra sonic wave and magnetic field” would have been application specific to one skilled in the art since Nagai has no limitation of the carrier.

**Regarding claim 10**, the claimed subject matter “(a) a modem for demodulating the arbitrary datum, the datum having been modulated by a modulation scheme, and (b) a detector to detect the signal, the signal having been sent via modifications of the carrier according to a modification scheme” would have been obvious to one skilled in the art since it is a reversed process of that of claim 1 being performed at the receiving end.

**Regarding claim 11**, the claimed subject matter “wherein said modification scheme includes a pattern of modifications to the carrier, and wherein the receiver further comprises: (c) a processor for identifying said pattern” would have been optional to one skilled in the art since a “processor” could have been included to determine such specified communication parameters in Nagai.

**Regarding claim 13**, similar analogy as that in claim 11 applied.

**Regarding claim 14**, see claim 2 above.

**Regarding claim 15**, the claimed subject matter “wherein said processor further evaluates communication performance” would have been understood by one skilled in the art as application specific.

**Regarding claims 16-17**, similar analogy as that in claim 15 applied.

Regarding claim 36, see claims 1 and 10, collectively.

Regarding claim 19, similar analogy with that of claim 11.

Regarding claims 21-22, see claims 2-3 above, respectively.

Regarding claim 23, see claim 13 above.

Regarding claim 24, see claim 17 above.

Regarding claims 26-29, these claimed subject matter would have been understood by one skilled in the art as application specific.

**Regarding claims 35, 38**, these claimed subject matter would have been basis communication establishment based on Nagai and would have been understood by one skilled in the art in view of Nagai as a whole.

***Allowable Subject Matter***

5. Claims 12, 20, 30, 31, 33, 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claim 37 is allowed.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Liu et al. (US 6,259,314) disclose Built-In Self Test For A Satellite Demodulator.

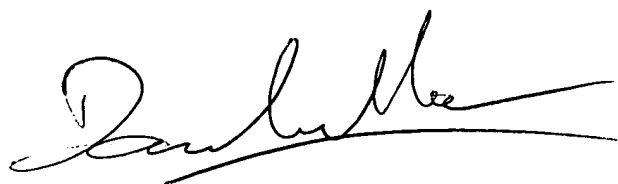
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 571-272-3040.

The examiner can normally be reached on 5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Dac V. Ha', with a long horizontal flourish extending to the right.

Dac V. Ha  
Primary Examiner  
Art Unit 2634